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**TRANSMITTAL
FORM**

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Total Number of Pages in This Submission

11

Application Number

10/601,602

Filing Date

June 23, 2003

First Named Inventor

Jackson, J. R.

Art Unit

1742

Examiner Name

WILKINS, III, R. B.

Attorney Docket Number

FC - 10

ENCLOSURES (Check all that apply)

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SIGNATURE OF APPLICANT, ATTORNEY, OR AGENT

Firm Name	Andrew E. Pierce, Patent Attorney		
Signature	<i>Andrew E. Pierce</i>		
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Date	June 4, 2007	Reg. No.	26,017

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**FC-10 IN THE UNITED STATES PATENT AND TRADEMARK OFFICE
BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES**

In re Appellant: Jackson et al
Serial No.: 10/601,602
Appeal No.: 1007 - 1368
Filing date: June 23, 2003
For: Low Energy Chlorate Electrolytic Cell and Process

Board of Patent Appeals and Interferences
P.O. Box 1450
Alexandria, Virginia 22313-1450

REQUEST FOR REHEARING UNDER 37 CFR 41.52

Hon. Board of Appeals:

In response to the Decision on Appeal, decided on April 30, 2007, this is to request a rehearing, on the written record, on the basis that the Board of Appeals (hereinafter Board) is considered to have misapprehended facts and acted upon an improper legal presumption pertinent to arriving at the Decision on Appeal. This request is timely filed as being submitted within the two month period after the Decision on Appeal. The considered misapprehension of facts and improper legal presumption are particularly

pointed out below followed by an enumeration of the contrary true facts and the proper presumption, as perceived by the Appellants.

I. Misapprehension of Pertinent Facts and legal presumption
by the Board

1. The Appellants' Specification is not enabling in regard to making the membrane component of the claimed electrolytic cell (Claims 8 - 17). Accordingly, the Appellants' must disclose in the Specification how to make the membrane component of Claims 8 - 17, as stated in the Decision on Appeal, page 3, 2nd, and 3rd paragraphs.

2. The Appellants' low alkali metal ion transport efficiency cell membrane is not in the prior art since the prior art membranes have 92 - 96 % alkali metal ion transport efficiency and the Appellants' membrane must be made by modification of said prior art membrane, as stated in the Decision on Appeal, page 3 and page 4, mid-page.

3. The Appellants' Declaration provides no evidentiary support for the statement that the Appellants' cell membrane component of the assembly of Claims 8 - 17 is commercially available, as stated in the Decision on Appeal, page 4, first half of page.

4. The Appellants' Declaration provides evidence that the prior art membranes must be modified in some way to qualify as membranes within the scope of Claims 8 - 17, as stated in the Decision on Appeal, page 4, mid-page.

5. (All) Commercially available separation membranes must be modified to obtain the Appellants' cell membrane component of Claims 8 - 17, as stated in the Decision on Appeal, page 5, 1st full paragraph.

6. It is considered presumed by the Examiner and the Board that the low alkali metal ion transport efficiency numerical limitation of claim 9 can be "read into" Claim 8. This presumption is considered implied in the rejection of Claims 8 - 17 by the Examiner and in the Decision on Appeal, in view of the fact that the rejection of Claim 8 is not treated separately from the rejection of Claims 9 - 17.

II. Pertinent Facts and Proper Legal Presumption

as Perceived by the Appellants

1. In the Appellants' Specification there are disclosed tradenamed Nafion cell membranes in Examples 8, 9, & 10 (Nafion 324 and Nafion 551). Merely in view of the fact that these membranes are described under the tradename "Nafion", is sufficient basis for

categorizing these membranes as in the public domain and, thus, in the prior art. Accordingly, independent Claim 8 is considered to meet the requirements of 35 USC 112 and Claims 9 - 17, being dependent thereon, are considered to meet the requirements of 35 USC 112 because (1) these claims are dependent or ultimately dependent upon a claim which meets the requirements of 35 USC 112 and (2) because anyone skilled in this art would know to vary the amount of the Teflon reinforcement to be added as a modification of a 92 - 96 % alkali metal ion transport efficiency base Nafion membrane to obtain the desired extent of low alkali metal ion transport efficiency in the modified membrane.

2. In the Declaration under Rule 1.132, filed on June 2, 2006, one of the inventors (J. R. Jackson) states that Nafion 324 & Nafion 551 are commercially available, as set forth on page 2, mid-page of said Declaration.

3. Evidentiary support for the fact that the membrane component of Claim 8 is commercially available can be found at: www.sigmaaldrich.com.

4. The Nafion membrane component of the electrolytic cell assembly of Claim 8 can be made by modification of certain of the prior art Nafion membranes, for instance, Nafions 112, 1135, 115, & 117 having 92 - 96 % alkali metal ion transport efficiency, by the addition

of (reinforcing) Teflon fibers, as stated in said Declaration on page 2, last paragraph, page 3, last paragraph, mid-page, and on page 4.

5. In said Declaration it is stated that a base perfluorosulfonic acid polymer (membrane) (Nafions 112, 1135, 115, & 117) having 92 - 96 % alkali metal ion transport efficiency (for use in chlor-alkali cells) can be modified to produce the prior art membrane component of the electrochemical cell of Claim 8 (and Claims 9 - 17) by the addition of Teflon fibers, as set forth in said Declaration on page 2, last paragraph, page 3, last paragraph, mid-page, and page 4.

6. Said Declaration does not state that (all) commercially available Nafion (separation) membranes must be modified to obtain the membrane component of Claim 8 (and Claims 9 - 17). Rather, in said Declaration, inventor, J. R. Jackson, has stated that prior art membranes, for instance, Nafions 112, 1135, 115, and 117, having 92 - 96 % alkali metal ion transport efficiency can be modified so as to produce the prior art membrane component of the cell of Claim 8, as stated in said Declaration on page 2, last paragraph, page 3, first paragraph, and page 4.

7. The Appellants' Specification is considered enabling for the limitation "low alkali metal ion transport efficiency", as recited in Claim 8. No numerical limits for the transport

efficiency of the membrane are recited in Claim 8. In the Appellants' Specification, pages 25 to 30, Examples 8 -10, there are disclosed enabling examples of low alkali metal ion transport efficiency membranes having 79 % and 65 %.

8. Since Claim 8 is enabled in said Specification, as shown in item 7 above, Claims 9 - 17 are enabled, as being dependent or ultimately dependent upon an enabled claim and the fact that anyone skilled in this art would know to vary the amount of Teflon reinforcement to obtain the desired amount of alkali metal ion transport efficiency.

III. ARGUMENTS

1) But for the Board's erroneous conclusion (I., 1 above) that the Appellants' Specification is not enabling because said Specification does not describe how to make the membrane component of claim 8 (which is in the prior art), it is considered that there would be no basis for the Board's rejection of Claim 8 and Claims 9 - 17, dependent thereon, on this account under 35 USC 112, first paragraph.

2) But for the Board's erroneous conclusion (I., 3 above) that the membrane component of the Appellants' Claim 8 is not in the prior art, in spite of the disclosure in said Specification of prior art, low alkali metal ion transport efficiency membranes, as used

in Examples 8, 9, & 10, it is considered that there would be no basis on this account for the Board's rejection of Claim 8 and Claims 9 - 17, dependent thereon, on this account.

3) The Board's reference to the lack of evidentiary support (and the need therefor) for the statement in said Declaration that the membrane component of Claim 8 is commercially available (I., 4 above) is improper and not required in view of the submission of said Declaration (under oath) by one of the inventors.

4) The Board apparently believes (I., 4 & 5 above) that a description in said Declaration of a method of making the membrane component of Claim 8 by modification of the prior art 92 % to 96 % alkali metal ion transport efficiency (chlor-alkali) membranes by the addition of Teflon fibers would somehow render false the statement in said Declaration that the membrane of Claim 8 is in the prior art. Since the membranes of Examples 8, 9, & 10 are in the prior art, as indicated merely by their description in said Specification as "Nafion 324 and Nafion 551", there is no need to disclose how to make these membranes. This erroneous belief of the Board would provide no basis for the 35 USC 112, first paragraph, rejection of Claims 8 - 17 by the Board.

5) The Board appears to adopt the erroneous position taken by the Examiner during prosecution in which the numerical limits recited in dependent Claim 9 are improperly read

into independent Claim 8. There is no basis for this claim interpretation. Said Specification in Examples 8, 9, & 10 is considered to provide sufficient basis for the compliance of Claim 8 with 35 USC 112, first paragraph, by disclosing prior art low alkali metal ion transport efficiency permselective polymer membranes having 79 % and 65 % alkali metal ion transport efficiency. The first paragraph of 35 USC 112 requires that the scope of the claims must bear only a reasonable correlation to the scope of enablement in said Specification to persons of ordinary skill in the art.

6) In the instant case, the scope of enablement provided in said Specification is considered to allow broad enablement scope in the sense that once that it is shown that Teflon fiber addition (reinforcement) to a perfluorinated (Nafion) membrane is a means of reducing the alkali metal ion transport efficiency of the membrane, other embodiments become predictable and can be made without difficulty by anyone skilled in this art. The low alkali metal ion transport efficiency of the membranes in Examples 8 - 10 of said Specification is considered to clearly distinguish Claim 8 membranes over the prior art chlor-alkali membranes having 92 - 96 % alkali metal ion transport efficiency. An independent claim stands alone as to patentability. Reading into independent claim 8 the numerical limits of dependent claim 9 is not permissible. However, dependent Claims 9 - 17 must be considered to meet the requirements of 35 USC 112, since these claims are

dependent or ultimately dependent upon Claim 8, which meets the requirements of 35 USC 112, first paragraph.

7) With regard to the rejection of Claims 34 and 35 over the prior art references, the Board's adoption of the Examiner's basis for rejection, including reliance upon the cases cited in MPEP 2114 and 2115, while ignoring those cases cited by the Appellants, including certain of the cases cited in MPEP 2111.02 (II), is considered inappropriate. In view of the "clear reliance" by the Appellants upon the preamble during prosecution, including the Appellants' proposal, in the Amendment under Rule 116, to place Claims 8 and 34 in Jepson format, it is considered that the Board's discussion is essentially unresponsive. The Board is invited to review the MPEP 2111.02 (II) and cases cited in the Reply Brief filed on December 12, 2006, pages 14 - 19.

8) Indeed, should the Board continue to maintain the affirmation of the Examiner's rejection of Claims 34 and 35, the Board is requested to provide a reasoned response as to why the cases cited by the Appellants' should not be followed. Of particular note are the cases and discussion thereof in the Reply Brief of the *Pitney Bowes V. Hewlet Packard*, 182 F. 3d 1298 at 1305, Fed. Cir. 1999 (cited in the Reply Brief at the top of page 17) and the *Kropa v. Robie*, 187 F. 2d 150 at 152 (CCPA 1951) To date, no discussion appears in the

record of the Appellants' arguments and citation of cases as precedents for affording the preamble of Claim 34 patentable weight.

IV Conclusions

The Appellants have shown that the affirmation of the Examiner with respect to Claims 8 - 17 cannot stand, based as it is upon the adoption by the Board of (1) the Examiner's erroneous view of the facts and (2) the Examiner's improper reading into independent Claim 8 of the numerical limits of dependent Claim 9. Claims 34 and 35 define over the references cited by the Examiner in view of the recitation of the preamble in Claim 34.

Reversal of the Examiner is respectfully requested.

Respectfully submitted,



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June 4th 2007
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